

What is claimed is:

1. A refrigeration lubricant composition comprising a lubricant and an amphiphilic anti-deposition component.
2. A lubricant composition according to claim 1 for use in a refrigeration system with a hydrogen-containing refrigerant comprising a synthetic lubricant and an amphiphilic anti-deposition component.
3. A lubricant composition according to claim 1 for use in a refrigeration system with a refrigerant comprising a hydrofluorocarbon and/or a hydrochlorofluorocarbon which comprises a synthetic lubricant comprising a polyol ester and/or a polyalkylene glycol and an amphiphilic anti-deposition component.
4. A composition according to claim 1 in which the amphiphilic anti-deposition component is such that in the Dispersibility Test described herein, the phases of R134a and the total oil mixture separate after at least 10 seconds.
5. A composition according to claim 1 in which the anti-deposition component is anionic and contains a non-polar part to the molecule.
6. A composition according to claim 5 in which the non-polar part to the molecule contains a fluorocarbon group.
7. A composition according to claim 1 in which the component is anionic and comprises a sulphonate or a phosphate moiety.
8. A composition according to claim 1 in which the anti-deposition component is selected from an alkyl sulposuccinate, an aromatic sulphonic acid and a

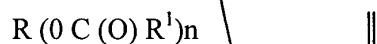
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petroleum sulphonate, a fluoroaliphatic polymeric ester, and a solution of an acrylic graft copolymer.

9. A composition according to claim 1 in which the anti-deposition component is present at a level of 0.001 to 5% based on the weight of the lubricant.

10. A composition according to claim 1 in which the lubricant comprises a compound of the general formula ||:



wherein R is a hydrocarbon radical remaining after removing the hydroxyl groups from pentaerythritol, dipentaerythritol, tripentaerythritol, trimethylol ethane, trimethylol propane or neopentyl glycol, or the hydroxyl containing hydrocarbon radical remaining after removing a proportion of the hydroxyl groups from pentaerythritol, dipentaerythritol, tripentaerythritol, trimethylol ethane, trimethylol propane or neopentyl glycol; each R¹ is, independently, H, a straight chain aliphatic hydrocarbyl group, a branched chain aliphatic hydrocarbyl group, an aliphatic hydrocarbyl group (linear or branched) containing a carboxylic acid or carboxylic acid ester substituent, provided that at least one R¹ group is a linear aliphatic hydrocarbyl group or branched aliphatic hydrocarbyl group; and n is an integer.

11. A composition according to claim 10 in which the ester comprises an ester of pentaerythritol, dipentaerythritol and/or tripentaerythritol and each R¹ is selected from a straight chain aliphatic hydrocarbyl group and a branched chain aliphatic hydrocarbyl group.

12. A composition according to claim 1 in which the lubricant comprises a polyalkylene glycol.

13. A composition according to claim 1 in which the refrigerant comprises 1,1,1,2-tetrafluoroethane.

14. A composition according to claim 1 in which the refrigerant comprises a blend of 2 or more hydrofluorocarbon refrigerants.

15. A refrigeration system comprising a compressor, a condenser, an expansion device and an evaporator linked to form a loop in which a refrigerant circulates and is successively condensed and evaporated so as to provide a refrigeration effect the refrigerant comprising a hydrofluorocarbon and/or a hydrochlorofluorocarbon refrigerant, and the system further containing a refrigeration lubricant composition as defined in any one of the preceding claims.

16. Use of a refrigeration lubricant as defined in claim 1 in a refrigeration system for the inhibition of deposition or the removal of residues which adversely affect the performance of the refrigeration system.

17. A method of inhibiting the deposition of or removing unwanted residues in a refrigeration system which comprises operating a refrigeration system when charged with a hydrogen-containing refrigerant and a refrigeration lubricant composition as defined in claim 1.

18. A method according to claim 17 including the steps of operating the refrigeration system containing a refrigerant and a lubricant, adding the anti-deposition component to the system, and operating the system further so as to inhibit deposition or remove deposits of unwanted residues.